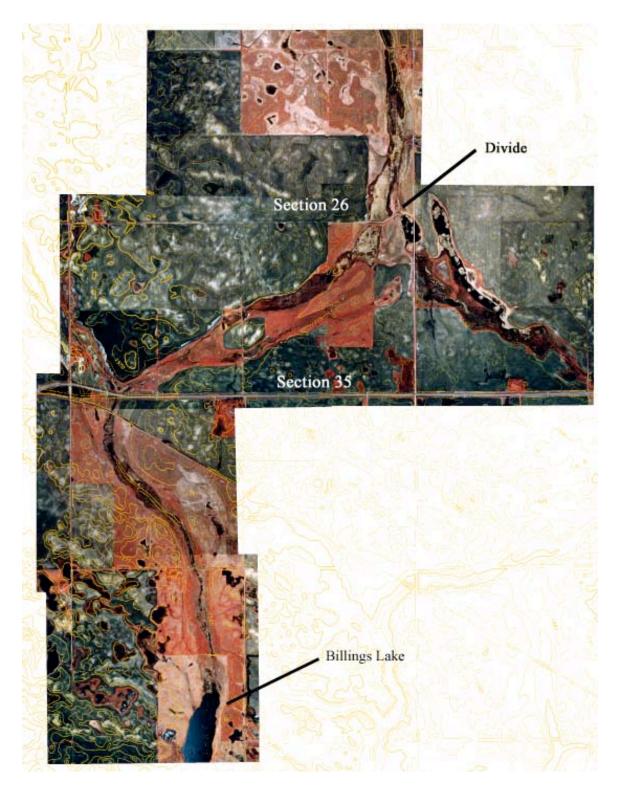
<u>Documented Interbasin Water Connections</u> <u>Between The Devils Lake and Pembina River Basins</u> May, 2004

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Connection in 1997

This connection between the Devils Lake and Pembina River basins was documented by an aerial color infrared photo taken in early June of 1997. Because the connection was documented aerially, we are uncertain which direction the water was flowing, or for how long the water flowed. 1997 was a winter with record amounts of snowfall in the Devils Lake basin.

<u>1997-1:</u> This is an aerial picture of the divide area. Billings Lake is just visible in the bottom of the image. In an infrared image, water is black. The picture shows water crossing the divide in the area between the SE corner of section 26 and the NE corner of section 35.



Connection in 2003

This connection, observed on April 12, 2003, was estimated to have lasted for approximately one month. These pictures were taken by Larry Gellner of the Cavalier County Water Board. This connection occurred after a relatively dry winter in the basin.

The direction of water flow was north, from the Devils Lake basin into the Pembina River basin.

<u>2003-1:</u> This picture is looking north from a 36" corrugated metal pipe located in the SE corner of section 26, Township 160, and Range 61. This area is located at the basin divide between the Devils Lake and Pembina River basins, approximately four miles west, and four miles north of Nekoma, in Cavalier County, North Dakota.



<u>2003-2:</u> This picture is looking northwest from a 36" corrugated metal pipe located in the SE corner of section 26, Township 160, and Range 61. This area is located at the basin divide between the Devils Lake and Pembina River basins, approximately four miles west, and four miles north of Nekoma, in Cavalier County, North Dakota.



<u>2003-3:</u> This picture is looking southwest from a 36" corrugated metal pipe located in the NE corner of section 35, Township 160, and Range 61. This area is located at the basin divide between the Devils Lake and Pembina River basins, approximately four miles west, and four miles north of Nekoma, in Cavalier County, North Dakota.



<u>2003-4:</u> This picture is looking southwest from a 36" corrugated metal pipe located in the NE corner of section 35, Township 160, and Range 61. This area is located at the basin divide between the Devils Lake and Pembina River basins, approximately four miles west, and four miles north of Nekoma, in Cavalier County, North Dakota.



Connection in 2004

This connection, observed on April 6, 2004, was estimated to have lasted for approximately one week. These pictures were taken by the North Dakota State Water Commission survey crew, who also took measurements with a water flow meter. Water was estimated to be flowing at approximately 15 cfs through the 36" corrugated metal pipe. The direction of water flow was north, from the Devils Lake basin into the Pembina River basin.

<u>2004-1:</u> This picture is looking north from a 36" corrugated metal pipe located in the SE corner of section 26, Township 160, and Range 61. This area is located at the basin divide between the Devils Lake and Pembina River basins, approximately four miles west, and four miles north of Nekoma, in Cavalier County, North Dakota.



<u>2004-2:</u> This picture is looking south from a 36" corrugated metal pipe located in the NE corner of section 35, Township 160, and Range 61. This area is located at the basin divide between the Devils Lake and Pembina River basins, approximately four miles west, and four miles north of Nekoma, in Cavalier County, North Dakota.



<u>2004-3:</u> This picture is looking south from the NE corner of section 35, Township 160, and Range 61. This area is located at the basin divide between the Devils Lake and Pembina River basins, approximately four miles west, and four miles north of Nekoma, in Cavalier County, North Dakota.



<u>2004-4:</u> This picture is looking south from east-west road in the NE corner of section 26, Township 160, and Range 61. This area is located approximately one mile north of the basin divide between the Devils Lake and Pembina River basins, approximately four miles west, and five miles north of Nekoma, in Cavalier County, North Dakota.



<u>2004-5:</u> This picture is looking north from east-west road in the SE corner of section 23 Township 160, and Range 61. This area is located approximately two miles north of the basin divide between the Devils Lake and Pembina River basins, approximately four miles west, and six miles north of Nekoma, in Cavalier County, North Dakota.

